

ABCC13 (B-2): sc-390691

BACKGROUND

The ATP-binding cassette (ABC) superfamily is comprised of transmembrane proteins involved in energy-dependent transport of a variety of substrates across membranes. ABCC13 is a 274 amino acid protein belonging to the MRP subfamily of the ABC transporter family. ABCC13 contains one ABC transmembrane type-1 domain, but does not contain Walker A, Walker B, and signature C motifs that are present in most ABC proteins, which indicates ABCC13 is not a functional transporter. ABCC13 has highest levels in colon and is present at lower levels in brain, liver, placenta, lung, ovary and pancreas. ABCC13 is expressed as five isoforms produced by alternative splicing.

REFERENCES

1. Dean, M., Rzhetsky, A. and Allikmets, R. 2001. The human ATP-binding cassette (ABC) transporter superfamily. *Genome Res.* 11: 1156-1166.
2. Yabuuchi, H., Takayanagi, S., Yoshinaga, K., Taniguchi, N., Aburatani, H. and Ishikawa, T. 2002. ABCC13, an unusual truncated ABC transporter, is highly expressed in fetal human liver. *Biochem. Biophys. Res. Commun.* 299: 410-417.
3. Gardiner, K., Slavov, D., Bechtel, L. and Davisson, M. 2002. Annotation of human chromosome 21 for relevance to Down syndrome: gene structure and expression analysis. *Genomics* 79: 833-843.
4. Brun, M.E., Ruault, M., Ventura, M., Roizès, G. and De Sario, A. 2003. Juxtacentromeric region of human chromosome 21: a boundary between centromeric heterochromatin and euchromatic chromosome arms. *Gene* 312: 41-50.
5. Online Mendelian Inheritance in Man, OMIM™. 2004. Johns Hopkins University, Baltimore, MD. MIM Number: 608835. World Wide Web URL: <http://www.ncbi.nlm.nih.gov/omim/>

CHROMOSOMAL LOCATION

Genetic locus: ABCC13 (human) mapping to 21q11.2.

SOURCE

ABCC13 (B-2) is a mouse monoclonal antibody specific for an epitope mapping between amino acids 66-99 of ABCC13 of human origin.

PRODUCT

Each vial contains 200 µg IgM kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-390691 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% stabilizer protein).

STORAGE

Store at 4° C, ****DO NOT FREEZE****. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

RESEARCH USE

For research use only, not for use in diagnostic procedures.

APPLICATIONS

ABCC13 (B-2) is recommended for detection of ABCC13 of mouse, rat and human origin by Western Blotting (starting dilution 1:100, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

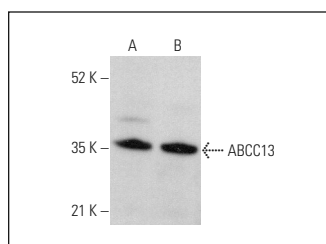
Molecular Weight of ABCC13: 31 kDa.

Positive Controls: HeLa whole cell lysate: sc-2200 or c4 whole cell lysate: sc-364186.

RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgGκ BP-HRP: sc-516102 or m-IgGκ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein L-Agarose: sc-2336 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use m-IgGκ BP-FITC: sc-516140 or m-IgGκ BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz® Mounting Medium: sc-24941 or UltraCruz® Hard-set Mounting Medium: sc-359850.

DATA



ABCC13 (B-2): sc-390691. Western blot analysis of ABCC13 expression in HeLa (A) and c4 (B) whole cell lysates.

PROTOCOLS

See our web site at www.scbt.com for detailed protocols and support products.